IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

INTERNATIONAL LICENSE EXCHANGE OF AMERICA, LLC Plaintiff, v. NTT COMMUNICATIONS CORPORATION, NTT COMMUNICATIONS ICT SOLUTIONS PTY LTD., NTT AMERICA, INC. and NTT SECURITY (US) INC., Defendants.	**Civil Action No. ______________** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff International License Exchange of America ("ILEA" or "Plaintiff"), for its Complaint against Defendant NTT Communications Corporation ("NTT Communications"), NTT Communications ICT Solutions Pty Ltd. ("NTT ICT"), NTT America, Inc. ("NTT America") and NTT Security (US) Inc. ("Solutionary"), (individually each a "Defendant" and collectively "Defendants" or "NTT"), alleges the following:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq*.

THE PARTIES

2. Plaintiff is a corporation organized under the laws of the State of Delaware with a place of business at 10 Balligomingo Rd., West Conshohocken, PA 19428.

3. Upon information and belief, NTT Communications is a corporation organized and existing under the laws of Japan, with a place of business at 1-1-6 Uchisaiwai, Chiyoda-ku,

Tokyo 100-8019, Japan, phone: +81-3-3500-8111. The CEO and President is Mr. Tetsuya Shoji. Upon information and belief, NTT Communications imports, sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

4. Upon information and belief, NTT ICT is a corporation organized and existing under the laws of Australia, with a place of business at Level 19, 321 Kent Street, Sydney NSW 2000. Upon information and belief, NTT ICT imports, sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services that into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

5. Upon information and belief, NTT America is a corporation organized and existing under the laws of Delaware, with a place of business at 757 Third Avenue 14th Floor, New York, NY 10017, and can be served through its registered agent at the Corporation Service Company, 2711 Centerville Rd, Suite 400, Wilmington, DE 19808. Upon information and belief, NTT America sells and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

6. Upon information and belief, Solutionary is a corporation organized and existing under the laws of Delaware, with a place of business at 9420 Underwood Ave., Omaha, NE 68114, and can be served through its registered agent at National Corporate Research, Ltd., 850 New Burton Road, Suite 201, Dover, DE 19904. Upon information and belief, Solutionary sells

and offers to sell products and services throughout the United States, including in this judicial district, and introduces products and services into the stream of commerce and that incorporate infringing technology knowing that they would be sold in this judicial district and elsewhere in the United States.

JURISDICTION AND VENUE

7. This is an action for patent infringement arising under the Patent Laws of the United States, Title 35 of the United States Code.

8. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a). Further, the patent asserted has already been the subject of a case transferred to this Court under Case No.: 1:15−cv−00869−SLR.

9. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(b), (c), (d) and/or 1400(b). On information and belief, each Defendant conducts business in this District, the claims alleged in this Complaint arise in this District, and the acts of infringement have taken place and are continuing to take place in this District.

10. On information and belief, each Defendant is subject to this Court's general and specific personal jurisdiction because each Defendant has sufficient minimum contacts within the State of Delaware and this District, pursuant to due process and/or the Delaware Long Arm Statute because each Defendant purposefully availed itself of the privileges of conducting business in the State of Delaware and in this District, because each Defendant regularly conducts and solicits business within the State of Delaware and within this District, and because Plaintiff's causes of action arise directly from each of Defendant's business contacts and other activities in the State of Delaware and this District. Further, this Court has personal jurisdiction over the Defendants because NTT America and Solutionary are incorporated in Delaware and have purposely availed themselves of the privileges and benefits of the laws of the State of Delaware.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. RE40,999

11. The allegations set forth in the foregoing paragraphs 1 through 10 are incorporated into this First Claim for Relief.

12. On November 24, 2009, U.S. Patent No. RE40,999 (“the ’999 patent”), entitled “VLAN Frame Format,” was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the ’999 patent is attached as Exhibit 1.

13. The inventive embodiments of the ’999 patent resolve technical problems related to virtual local area network (“VLAN”) and methods to format a data frame in VLAN network devices.

14. The claims of the ’999 patent do not merely recite the performance of some business practice known from the pre-Internet world along with a requirement to perform it on the Internet. Instead, the claims of the ’999 patent recite one or more inventive concepts that are rooted in computerized electronic data communications networks, and an improved method operate such networks and to maintain the interoperability of different physical configurations of such networks.

15. The claims of the ’999 patent recite an invention that is not merely the routine or conventional use of electronic devices for communications. Instead, among other things, the invention adds new features to integrate Ethernet and other protocols together on a shared network. The ’999 patent claims thus include improvements for, for example, formatting data frames to yield a desired result.

16. The technology claimed in the ’999 patent does not preempt all ways of using computerized devices or transmitting information over networks, nor preempt any other well-known or prior art technology.

17. Accordingly, each claim of the ’999 patent recites a combination of elements sufficient to ensure that the claim in practice amounts to significantly more than a patent on an ineligible concept.

18. Plaintiff is the assignee and owner of the right, title and interest in and to the ’999 patent, including the right to assert all causes of action arising under said patents and the right to any remedies for infringement of them.

19. Upon information and belief, each Defendant had and continued to directly infringe at least claims 1, 7, 11 and 12 of the ’999 patent by having made, used, sold, imported and/or provided for use without authority within the United States, a method to format a data frame in VLAN network devices; for example, depending on the physical configuration of a VLAN, the embodiments include a method to adjust the format of a data frame to reflect the characteristics of the particular physical configuration of the VLAN (the "’999 Accused Instrumentalities"). The ’999 Accused Instrumentalities include at least NTT’s Arcstar private networks (including VOIP), Smart Content Delivery; different Access plans based on Ethernet connections (*e.g*. Fast Ethernet, Gigabit Ethernet), Data Center Services, Global IP Network or global Ethernet Leased Line Service or E-Line, VLink services, Universal One Layer 2 VPN or E-LAN; and NTT’s ICT Vunerability Management Service that uses IEEE 802.1Q VLAN switches; and Solutionary’s Managed Security Services Provider service.

20. In particular, claim 1 of the ’999 patent generally recites a method of identifying a virtual network associated with a data frame when transmitting the data frame between a communications medium and a shared communications medium; where the method comprises: a) receiving the data frame from the communications medium, where the data frame includes a first type field and a data field; b) inserting a second type field at a location within the data frame

preceding the first type field, a value of the second type field indicating the data frame include a virtual network identifier field, c) inserting the virtual network identifier field at a location between the second type field and the first type field; d) assigning a first value to the virtual network identifier field, the first value corresponding to the virtual network; and e) transmitting the data frame over the shared communications medium.

21. On information and belief, use of the ’999 Accused Instrumentalities read on and infringe at least claim 1 of the ’999 patent. (*See*, *e.g.*, https://www.us.ntt.net/about/company.cfm; https://www.nttict.com/assets/PDFs/NTTICT-Brochure-Vulnerability.PDF; https://www.nttict.com/services/network-services/ethernet-leased-line-services/; http://www.us.ntt.net/news/view.cfm/The-Benefits-of-NTT-Americas-VLink?id=630; https://www.us.ntt.net/products/virtual-private-network/vlink.cfm; http://www.us.ntt.com/content/dam/nttcom/us/pdf/brochure/Universal_One_Layer_2_VPN_Service.pdf; and www.solutionary.com; http://www.ntt.com/business/services/voice-video/voip/ipvoice.html. *Also see* the IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Bridges and Virtual Bridge Local Area Networks, IEEE Std 802.1QTM-2011 (Revision of IEEE Std 802.1Q-2005), 31 August 2011 (*e.g*. p. 1, 23, 98, 103-105, 149-150, 1269); IEEE Std 802.1QTM-2014; IEEE Std 802.3TM-2012 (*e.g*. p. 53); IEEE 802.1Q VLAN Tutorial (Graham Shaw, *available at* http://www.microhowto.info/tutorials/802.1q.html, accessed April 4, 2016).)

22. Claim 7 of the ’999 patent generally recites the method of identifying a virtual network associated with a data frame when transmitting the data frame between a communications medium and a shared communications medium, where the method comprises: a) receiving the data frame from the communications medium, the data frame including a length

field and a data field; b) inserting a type field at a location within the data frame preceding the length field, a value of the type field indicating the data frame includes a virtual network identifier field; c) inserting the virtual network identifier field at a location between the type field and the length field, d) assigning a first value to the virtual network identifier field, the first value corresponding to the virtual network; and e) transmitting the data frame over the shared communications medium.

23. On information and belief, use of the ’999 Accused Instrumentalities read on and infringe at least claim 7 of the ’999 patent. (*See*, *e.g.*, https://www.us.ntt.net/about/company.cfm; https://www.nttict.com/assets/PDFs/NTTICT-Brochure-Vulnerability.PDF; https://www.nttict.com/services/network-services/ethernet-leased-line-services/; http://www.us.ntt.net/news/view.cfm/The-Benefits-of-NTT-Americas-VLink?id=630; https://www.us.ntt.net/products/virtual-private-network/vlink.cfm; http://www.us.ntt.com/content/dam/nttcom/us/pdf/brochure/Universal_One_Layer_2_VPN_Service.pdf; http://www.ntt.com/business/services/voice-video/voip/ipvoice.html; and www.solutionary.com. *Also see* the IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Bridges and Virtual Bridge Local Area Networks, IEEE Std 802.1QTM-2011 (Revision of IEEE Std 802.1Q-2005), 31 August 2011 (*e.g*. p. 1, 23, 98, 103-105, 149-150, 1269); IEEE Std 802.1QTM-2014; IEEE Std 802.3TM-2012 (*e.g*. p. 53); IEEE 802.1Q VLAN Tutorial (Graham Shaw, *available at* http://www.microhowto.info/tutorials/802.1q.html, accessed April 4, 2016).)

24. Claim 11 of the ’999 patent generally recites, in a network device, a method of transmitting a virtual network identifier in a data frame transmitted on a shared communications medium coupled to the network device, comprising: a) transmitting a preamble field, b)

transmitting a destination and source media access control address field; c) transmitting a first type field whose contents indicate the virtual network identifier is present in the data frame; d) transmitting a virtual network identifier field containing the virtual network identifier; e) transmitting a second type field whose contents indicate a protocol type associated with the data frame; and, f) transmitting a data field.

25. On information and belief, use of the ’999 Accused Instrumentalities read on and infringe at least claim 11 of the ’999 patent. (*See*, *e.g.*, https://www.us.ntt.net/about/company.cfm; https://www.nttict.com/assets/PDFs/NTTICT-Brochure-Vulnerability.PDF; https://www.nttict.com/services/network-services/ethernet-leased-line-services/; http://www.us.ntt.net/news/view.cfm/The-Benefits-of-NTT-Americas-VLink?id=630; https://www.us.ntt.net/products/virtual-private-network/vlink.cfm; http://www.us.ntt.com/content/dam/nttcom/us/pdf/brochure/Universal_One_Layer_2_VPN_Service.pdf; and www.solutionary.com. *Also see* the IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Bridges and Virtual Bridge Local Area Networks, IEEE Std 802.1QTM-2011 (Revision of IEEE Std 802.1Q-2005), 31 August 2011 (*e.g*. p. 1, 23, 98, 103-105, 149-150, 1269); IEEE Std 802.1QTM-2014; IEEE Std 802.3TM-2012 (*e.g*. p. 53); IEEE 802.1Q VLAN Tutorial (Graham Shaw, *available at* http://www.microhowto.info/tutorials/802.1q.html, accessed April 4, 2016).)

26. Claim 12 of the ’999 patent generally recites the method of claim 11, wherein the virtual network identifier field is 4 bytes.

27. On information and belief, use of the ’999 Accused Instrumentalities read on and infringe at least claim 12 of the ’999 patent. (*See*, *e.g.*, the IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Bridges and Virtual Bridge Local

Area Networks, IEEE Std 802.1QTM-2011 (Revision of IEEE Std 802.1Q-2005), 31 August 2011 (*e.g*. p. 1, 23, 98, 103-105, 149-150, 1269); IEEE Std 802.1QTM-2014; IEEE Std 802.3TM-2012 (*e.g*. p. 53); IEEE 802.1Q VLAN Tutorial (Graham Shaw, *available at* http://www.microhowto.info/tutorials/802.1q.html, accessed April 4, 2016).)

28. On information and belief, these ’999 Accused Instrumentalities were used marketed, provided to, and/or used by or for each of Defendant’s partners, clients, customers and end users across the country and in this District.

29. Plaintiff has been harmed by Defendants’ infringing activities.

COUNT II – INFRINGEMENT OF U.S. PATENT NO. 5,959,990

30. The allegations set forth in the foregoing paragraphs 1 through 29 are incorporated into this Second Claim for Relief.

31. On September 28, 1999, U.S. Patent No. 5,959,990 (“the ’990 patent”), entitled “VLAN Frame Format,” was duly and legally issued by the United States Patent and Trademark Office. A true and correct copy of the ’990 patent is attached as Exhibit 2.

32. The inventive embodiments of the ’990 patent resolve technical problems related to virtual local area network (“VLAN”) and methods to format a data frame in VLAN network devices.

33. The claims of the ’990 patent do not merely recite the performance of some business practice known from the pre-Internet world along with a requirement to perform it on the Internet. Instead, the claims of the ’990 patent recite one or more inventive concepts that are rooted in computerized electronic data communications networks, and an improved method operate such networks and to maintain the interoperability of different physical configurations of such networks.

34. The claims of the ’990 patent recite an invention that is not merely the routine or conventional use of electronic devices for communications. Instead, for example, the invention adds new features to integrate Ethernet and other protocols together on a shared network. The ’990 patent claims thus include improvements for, for example, formatting data frames to yield a desired result.

35. The technology claimed in the ’990 patent does not preempt all ways of using computerized devices or transmitting information over networks, nor preempt any other well-known or prior art technology.

36. Accordingly, each claim of the ’990 patent recites a combination of elements sufficient to ensure that the claim in practice amounts to significantly more than a patent on an ineligible concept.

37. Plaintiff is the assignee and owner of the right, title and interest in and to the ’990 patent, including the right to assert all causes of action arising under the patents and the right to any remedies for infringement of them.

38. Upon information and belief, each Defendant had and continued to directly infringe at least claim 1 of the ’990 patent by having made, used, sold, imported and/or provided for use without authority within the United States, a method to transmit a data frame in VLAN network devices; for example, depending on the physical configuration of a VLAN, the embodiments include a system to transmit a formatted data frame to reflect the characteristics of the particular physical configuration of the VLAN (the “’990 Accused Instrumentalities”). The ’990 Accused Instrumentalities include at least NTT’s Arcstar private networks (including VOIP), Smart Content Delivery; different Access plans based on Ethernet connections, Data Center Services, Global IP Network or global Ethernet Leased Line Service or E-Line, VLink

services, Universal One Layer 2 VPN or E-LAN; and NTT's ICT Vunerability Management Service that uses IEEE 802.1Q VLAN switches; and Solutionary's Managed Security Services Provider service.

39. In particular, claim 1 of the '990 patent generally recites a method in a network device. The method includes transmitting, on a shared communications medium coupled to the network device, a data frame associated with a virtual network, comprising the steps of: a) transmitting a data frame having a type field whose contents indicate the data frame comprises a virtual network identifier field; and, b) transmitting the virtual network identifier field whose contents indicate the virtual network associated with the data frame.

40. On information and belief, use of the '990 Accused Instrumentalities read on and infringe at least claim 1 of the '990 patent. (*See*, *e.g.*: https://www.us.ntt.net/about/company.cfm; https://www.nttict.com/assets/PDFs/NTTICT-Brochure-Vulnerability.PDF; https://www.nttict.com/services/network-services/ethernet-leased-line-services/; http://www.us.ntt.net/news/view.cfm/The-Benefits-of-NTT-Americas-VLink?id=630; https://www.us.ntt.net/products/virtual-private-network/vlink.cfm; http://www.us.ntt.com/content/dam/nttcom/us/pdf/brochure/Universal_One_Layer_2_VPN_Service.pdf; http://www.ntt.com/business/services/voice-video/voip/ipvoice.html; and www.solutionary.com. *Also see* the IEEE Standard for Local and metropolitan area networks: Media Access Control (MAC) Bridges and Virtual Bridge Local Area Networks, IEEE Std 802.1QTM-2011 (Revision of IEEE Std 802.1Q-2005), 31 August 2011 (*e.g.* p. 1, 23, 98, 103-105, 149-150, 1269); IEEE Std 802.1QTM-2014; and IEEE Std 802.3TM-2012 (*e.g.* p. 53); IEEE 802.1Q VLAN Tutorial (Graham Shaw, *available at* http://www.microhowto.info/tutorials/802.1q.html, accessed April 4, 2016).)

41. On information and belief, these ’990 Accused Instrumentalities were used, marketed, provided to, and/or used by or for each Defendant’s partners, clients, customers and end users across the country and in this District.

42. Plaintiff has been harmed by each Defendant’s infringing activities.

43. Because the ’999 and ’990 patents and sibling patents are necessary to practice IEEE 802.1Q technology, ILEA agrees to license users of IEEE 802.1Q technology under the ‘999 and ’990 patent family on reasonable, and non-discriminatory (RAND) terms. ILEA intends to abide by such terms by furnishing a courtesy copy of this Complaint upon filing, in advance of service, so that the Parties may amicably agree to such a RAND royalty. ILEA intends to negotiate such RAND terms in good faith, and will be amenable to a delay of service and/or an immediate stay of the matter if Defendants also negotiate in good faith, so that no party need bear any unnecessary cost or expense. If any of the Defendants contests the obligation to abide by such terms, through action or inaction, then Plaintiff shall proceed against any such Defendant as an unwilling licensee and pursue the highest damages and/or other relief available under the law.

JURY DEMAND

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Plaintiff demands a trial by jury on all issues triable as such.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff demands judgment for itself and against Defendants as follows:

A. An adjudication that each Defendant has infringed the ’999 and ’990 patents;

B. An award of damages to be paid by Defendants adequate to compensate Plaintiff for Defendants’ past infringement of the ’999 and ’990 patents, including interest, costs, expenses and an accounting of all infringing acts including, but not limited to, those acts not presented at trial;

C. A declaration that this case is exceptional under 35 U.S.C. § 285, and an award of Plaintiff's reasonable attorneys' fees; and

D. An award to Plaintiff of such further relief at law or in equity as the Court deems just and proper.

Dated: May 4, 2017

DEVLIN LAW FIRM LLC

/s/ Timothy Devlin
Timothy Devlin (#4241)
tdevlin@devlinlawfirm.com
1306 N. Broom St., 1st Floor
Wilmington, Delaware 19806

Telephone: (302) 449-9010
Facsimile: (302) 353-4251

Attorneys for Plaintiff
International License Exchange of America, LLC